5/26/06(V14)-A. Emrick (EMS Rep)

LIFE SCIENCES ENVIRONMENTAL ASPECTS LIST

ACTIVITY DESCRIPTION		Regulated Industrial Waste	Hazardous Waste	Radioactive Waste	Mixed Waste	Regulated Medical Waste	Radioactive Medical Waste	Atmospheric Discharges	Liquid Discharges	Water Consumption[2]	Chemical (C) Storage/Use or Radioactive Material (R)		Power Consumption[2,3]	Other	Historical Contamination	Soil Activation	Comments
Title	Number[1]										C	R					
Experimental Work (covered under Work Planning and Control for Experiments)	see ESRC	a	a	a	a	a	a	b,c	x	x	c, f	c	x	Nano			Nano work (BO)
BLIP Operations	Med-399-BLIP	a		a				b,c	a		x	a, b,c, f				a	Air monitoring[4.](NESHAPs compliance), secondary containment, D- tank & BLIP target chamber tank, groundwater contamination, soil activation.
TPL Operations	Med-575-TPL	a	a	a	a			b,c	a		x	a, b		x			Secondary containment[5.] - D tanks in Neut. Cell, Article 12 inspections, NESHAPs rad-air emissions , Isotopes are products that are shipped to vendors.
BLAF Operations	Med-375-BLAF	a		a(DIS)		a		X	c	X	a,b,c,f			a			a: IPM Plan, bedding conveyance system (P2)
Photographic Processing-Bio	Bio-066-PDO	a	a					x	b	x	x						Non-RCRA developer solutions disposed as industrial waste.
Photographic & Xray - Med	Med-374-PXO	a	a					x	b	x	x						Non-RCRA developer solutions disposed as industrial waste.
Vacuum Pumps	BO-069-VSM	a						x									No mixing of oils w/ haz. wastes.
Glassware Washing-Medical	Med-371-GCO	a.	a.	a				x	b.	x		a	x				D waste tank usage only significant at 801 (Hot-Side)
Autoclave Operations-Medical	Med-372-AO			a				b,c	x	x		a					D waste tank usage only significant at 801 (Hot-Side)
Agricultural Operations-Biology	Bio-067-ADO	a.	a					x	x	x	a, b, c, f		x	b	x		intra-site Xfer of HAZMAT, f - spill potential. Soil and groundwater contamination moved from FRDP (EDB-fields,
Facility Review Issues/ Comprehensive Env. Liabilities(Legacy)/Bldg (FUA)	FR Database	a.	a	a	a				x							a	Maintain compliance/Transfer/Close all items
Shop Operations/ Mechanical Tech Operations	Med-373-SSO	a						x	x		x						
Medical Waste Management/Clinical Research Center Operations	Med-370-MWM					a	a		x		c						Management of BNL RMW through MO. Additional MO procedures in IC-6/.02/3
Glassware Washing/Autoclave - Biology	BO-068-GCO	a	a					x	b	x			x				Sulfuric acid-ammonium persulfate glass cleaning solution.
Administrative/Computer Operations	N/A												x	x			Office waste
Stock Room	N/A										x						
90-Day, Rad, Mixed Waste Accumulation Areas	NA	x	x	x	x						x	x					Haz. Waste waste accumulation areas, waste not generated only accumulated
CERF	Bio-067-ADO											x					Radioactive source, interlocked
ROLL UP OF ASPECTS		a	a	a	a	a	a	b,c	b,c		a,b,c,f	a,b,c,f		a,b		a	

Note: If the aspect is not present, leave the cell blank. If the aspect is present but does not meet the significance criteria listed in the exhibit, "Criteria for Significant. Put an "X" in the cell. If the aspect meets one or more of the significance criteria listed in the exhibit, enter the letter designation for the applicable criteria in the cell.

[1] Facility Review Project, Phase II Project Number, or other organization reference number

[2] Organizational significance criteria

[3] Equipment uses 440 VAC or greater

[4.] Process modifications currently (8/02) being evaluated in order to reduce rad-air emissions to levels <NESHAPs threshold for permitting. Discussions w/ EPA ongoing.

[5.] Failed floor coating on formerly used F& D tanks (Note: tanks not owned by MO) - potential soil activation due to rain water intrusion.

Environmental Aspects Criteria from Identification of Environmental Aspects Subject Area

Core Environmental Aspects	
Regulated Industrial Waste Generation	*a) Any amount of regulated industrial waste generation.*
Hazardous Waste Generation	*a) Any amount of hazardous waste generation.*
Radioactive Waste Generation	*a) Any amount of radioactive waste generation.*
Mixed Waste Generation	*a) Any amount of mixed waste generation.*
Regulated Medical Waste Generation	*a) Any amount of regulated medical waste generation.*
Atmospheric Discharges	*a) Any process that requires a CERCLA equivalency permit or inclusion in the Title V permit as an emission unit, or contributes to* *b) Operations or activities that use engineering controls to reduce hazardous air pollutant or radionuclide emissions.* *c) Radioactive emissions that require monitoring by 40 CFR 61 Subpart H of the NESHAPS*
Liquid Discharges	*a) Radionuclides that are detectable at the point of discharge from the facility.* *b) Discharges of any of the chemicals listed on the exhibit BNL State Pollutant Discharge Elimination System (SPDES) Permit Chemicals.* *c) Operations or activities that use engineering controls to reduce the quantity or concentration of pollutant.* *d) Existence of underground injection control devices under the responsibility of the owner organization as specified in the Underground Injection Control Subject Area.*
Storage or Use of Chemicals or Radioactive Materials (potential for accidental release or contamination)	*a) Storage or use of chemicals or radioactive materials requiring engineering controls specified in the Storage and Transfer of Hazardous and Nonhazardous Materials Subject Area.* *b) System configuration requires back-flow prevention in accordance with the protection of the Drinking Water Subject Area.* *c) Transportation of chemicals or dispersible radioactive materials that meet the criteria for the Transfer of Hazardous Materials Onsite Subject Area, Transfer of Radioactive Materials Onsite Subject Area, Transportation of Hazardous Materials Offsite Subject Area, and Transportation of Radioactive Materials Offsite Subject Area.* *d) Storage or use of PCBs as specified in the PCB Management Subject Area.* *e) Any underground pipes or ducts that contain chemical and/or radioactive material/contamination.* *f) Storage or use in quantities capable of resulting in a spill, as defined in the Spill Response Subject Area.*
Water Consumption	*a) Total organizational water consumption greater than 650,000 gallons per day.* *b) Continuous (24 hrs/day), permanent (to continue for the foreseeable future) once-through water use greater than 4 gallons per minute (gpm) that discharges to the Sanitary Sewer System.* *c) Daily (8 hrs/day), permanent, once-through water use greater than 10 gpm that discharges to the Sanitary Sewer System.* *d) Continuous use greater than 10 gpm, or daily use greater than*
Power Consumption	*a) Total Organizational Power Consumption Greater than 58 M KWh/yr.*

Facility-specific Environmental Aspects	
Historical/Cultural Resources*	*a) Any modification to structures that are determined to be "Eligible for listing on the National Register of Historic Places" (BGRR, HFBR, and WWI trenches and foundations).* *b) Proposed modification to known archaeologically significant area(s) or discovery of archaeologically significant material (lithic scatter, bone, foundations, etc.)*
Sensitive/Endangered Species And Sensitive Habitats (including Pine Barrens)	*a) Potential for habitat disturbance, harm, or harassment within 850 feet of a critical habitat (recharge basins, vernal pools, natural and manmade ponds and waterways).* *b) Activity within 100 feet of a regulated wetland (that is already not identified as a critical habitat).* *c) Activity within ½ mile of the Peconic River.* *d)Activity affecting five or more acres of undeveloped land.*
Environmental Noise	*a) Exceed ordinance levels (7 am -10 pm: 55 dBA; 10 pm - 7 am: 50 dBA [20 min. average]) at property boundary or off-site location.*
Historical Contamination (groundwater, soil)	*a) Pre-existing contamination (radiological or nonradiological) causing remedial activities resulting in costs in excess of $50,000.*
Soil Activation	*a) Any soil activation.*
Transuranic Waste (TRU)	*a) Generation or potential to generate any radioactive waste stream classified as transuranic (TRU) waste (i.e., contains greater than 100 nanocuries per gram of transuranium isotopes).*
Other	*a) Any other compliance requirement specific to an organization or aspect that could impact the environment (e.g., asbestos research, odor,* *b) Any issue identified in the Facility Review Project as (1) "significant finding" or "lesser issue," or (2) BNL risk rank of #1 - 3.*